



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,638	01/26/2004	Russell A. Budd	YOR920000326US2	9109

7590 03/31/2008
Ryan, Mason & Lewis, LLP
90 Forest Avenue
Locust Valley, NY 11560

EXAMINER

BECK, ALEXANDER S

ART UNIT	PAPER NUMBER
----------	--------------

2629

MAIL DATE	DELIVERY MODE
-----------	---------------

03/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/764,638	Applicant(s) BUDD ET AL.	
	Examiner Alexander S. Beck	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Jan. 14, 2008, has been entered. Claims 1 and 3 are currently pending and an Office action on the merits follows.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,034,653 to Robertson et al. ("Robertson") in view of U.S. Patent No. 6,452,572 to Fan et al. ("Fan") and U.S. Patent No. 5,485,172 to Sawachika et al. ("Sawachika").

As to claim 1, Robertson discloses a compact head mounted virtual image display unit in Figure 15, the unit comprising: a microdisplay; an optical system for directing an image signal for viewing by a user, the image signal being generated in accordance with the microdisplay; an optical system mounting structure for supporting the optical system within the field of view of only a single eye of the user; a housing to substantially contain at least the optical system, wherein the image signal is viewed by the user with background light entering the optical system (Robertson, col. 8, ll. 10-25).

Robertson does not disclose expressly a slidable light shield, integrated within the housing and having an open position and a closed position, wherein the light shield is slidable along a length of an exterior wall of the housing and slidably positioned with respect to the optical system such that, in the open position, the image signal is viewed by the user, and in the closed position, the image signal is viewed by the user with background light partially blocked from entering the optical system, wherein the image signal is viewed together with the background light, as claimed.

Sawachika discloses a head mounted image display apparatus in Figures 2-3, comprising: a light shield (23b) integrated within a housing (23, 24) and having an open position and a closed position, and positioned with respect to the optical system (1, 2, 28, 29, 30) such that in the open position, the image signal is viewed by the user, and in the closed position, the image signal is viewed by the user with background light partially blocked from entering the optical system, wherein the image signal is viewed together with the background light (Sawachika, col. 3, ll. 22-24; see also col. 4, ll. 10-13). Thus, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Robertson such that the head mounted display unit comprised a light shield, as taught by Sawachika. As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to reduce an

amount of ambient light admitted through the display housing (Sawachika, col. 3, ll. 22-24), thereby improving display quality in extremely bright ambient light conditions.

Sawachika does not disclose expressly wherein the light shield is slidable along a length of an exterior wall of the housing and slidably positioned with respect to the optical system, as claimed. Fan discloses a compact head mounted image display unit in Figures 49 and 54, the unit comprising: a microdisplay, an optical system for directing an image signal for viewing by a user, a housing to substantially contain at least the optical system, and a slidable light shield, integrated within the housing and having an open position and a closed position, wherein the light shield is slidable along a length of an exterior wall of the housing (Fan, col. 22, ll. 50-61; see also col. 23, ll. 40-46). Because both Sawachika and Fan disclose the integration of a light shield within a head mounted image display unit, it would have been obvious to one skilled in the art to substitute one teaching for the other to achieve the predictable result of at least partially blocking background light from entering the optical system.

That is, instead of having the tinted/smoked light shield (Sawachika, 23b) transition from an open position to a closed position by flipping the light shield up and down about an axis, as taught by Sawachika (Sawachika, Fig. 3), it would have been obvious to one skilled in the art to further modify the teachings of Robertson and Sawachika such that the tinted/smoked light shield (Sawachika, 23b) was slidable along a length of an exterior wall of the housing and slidably positioned with respect to the optical system to facilitate opening and closing the light shield, as taught by Fan (Fan, Fig. 54). Thus, the proposed modification above allows the image signal to be viewed by a user with background light partially blocked from entering the optical system wherein the image signal is viewed together with the background light, as taught by (Sawachika, col. 3, ll. 22-24; see also col. 4, ll. 10-13), and allows the light shield to be opened and closed by sliding along a length of an exterior wall of the housing with respect to the optical system (Fan, Fig. 54).

As to claim 3, Sawachika discloses wherein the light shield is one of opaque, partially opaque, colored and polarized (Sawachika, col. 3, ll. 22-24).

Response to Arguments

4. Applicant's arguments with respect to claims 1 and 3 have been considered but are moot in view of the new ground of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander S. Beck whose telephone number is (571)272-7765. The examiner can normally be reached on M-F, 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/

Supervisory Patent Examiner, Art Unit 2629

asb

Mar. 24, 2008